"There are two ways of spreading light:
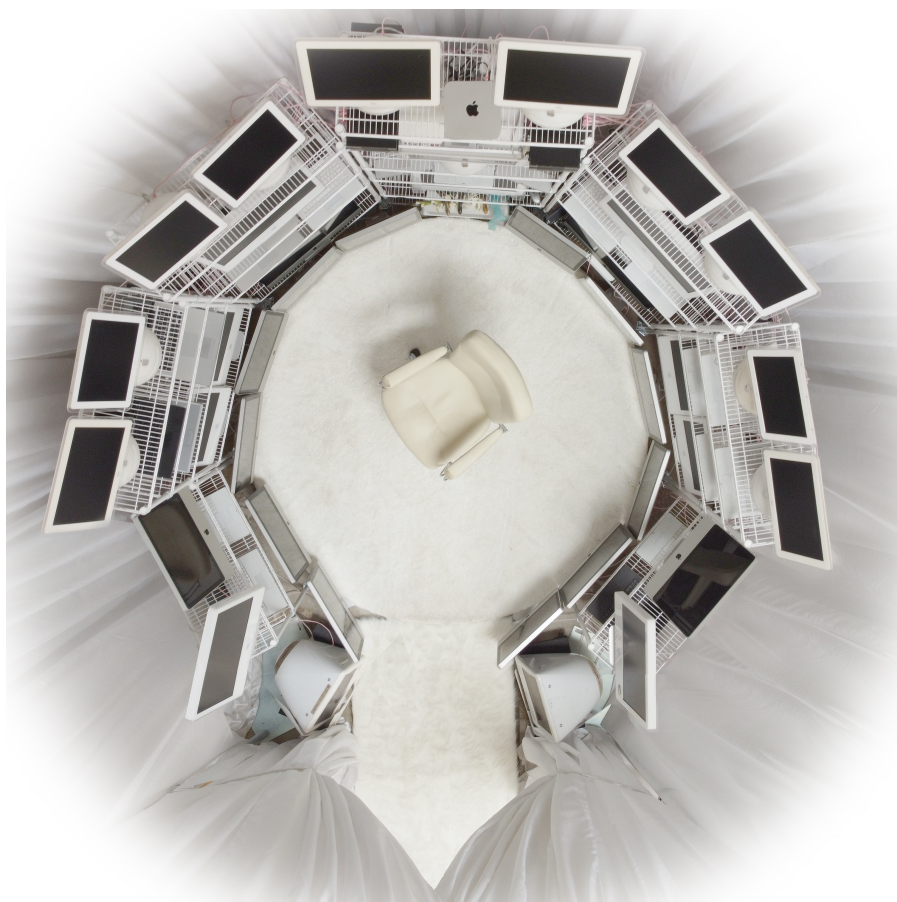*to be the candle or the mirror that reflects it."*
— Edith Wharton

*This art is dedicated
to all of the children
who have tried to
make sense
of the story that
women are to blame
for the ills of the world*

Contents

Introduction

Second Bite: The Wisdom of the Apple is an immersive art installation that treads new ground.

The art is engaging and satisfying on the physical-experiential level, yet there is more to the payload of this art than can be discerned from the outward-facing presentation.

This booklet unpacks the multiple levels and subtle nuances of this art. The intention, depth and meaning of this art are described in some detail in this booklet.

This booklet you are holding now is a shortened version of a larger book, which includes all of the content provided here and also provides background information about the artists: Adele Louise Shaw and Larry Dieterich. The bigger book contains several stories relating the creation and evolution of this Techno-Spiritual-Feminist-Activist-Devotional art, as well as documenting some remarkable coincidences that happened along the way.

The book also contains a Mystical Appendix that reveals the full text of the prayers being cast by this art, as well as some remarkable stories relevant to this art.

The book also contains a Technical Appendix that documents the details of the hardware and software used in the operation of this computer installation.

If you're interested in the big book, contact the artists.

About the Art and the Artists

There is a common-sense adage that advises "if you want to get along, don't discuss politics or religion". Second Bite: the Wisdom of the Apple flies squarely in the face of that advice; this art was created to discuss politics and religion. Not the politics of elections or affiliations, but the politics of culture and gender. The religious discussion of this art revisits the core creation myth of the Abrahamic faiths: The Biblical story of Eve and the Forbidden Fruit is a well-known story that has somewhat defined the status of women.

The artists, Adele and Larry, are a wife and husband team. It is useful and accurate to clearly state that neither of the artists are adherents or proponents of any religion. They avoid participation in witchcraft, spiritualism, fortune-telling, automatic writing, and the like. They live a simple, normal, rustic life with a wide circle of sane and intelligent friends. They belong to no religious cult, no secret society, no philosophical sect. They are artists with a social agenda, to promote gender equality, critical thinking and practical activism.

Second Bite: the Wisdom of the Apple addresses a core teaching of some major religions, but it does so as part of the feminist exegesis of this art.

> *Religions are places to stand and look and act,*
> *vantage points from which to view the world.*
> *— Neil Gaiman, American Gods p.683*

The Mechanism and Aspiration of this Art

This art is created using Apple computers that have been used and discarded; these computers are all dead to their former lives. In their previous lives, these computers were helpmates, enabling personal and transactional affairs. These contraptions are digital genies that have facilitated exploration and research, they enabled communication and learning, they helped tally and record, to analyze and share, they have nurtured sparks of human brilliance. They have witnessed delight and curiosity, epiphany and satisfaction. They have attended rage and disappointment. Thousands of hours of human intention, curiosity and emotion have passed across the circuits and components of these computers.

Now, dead to their former lives, they're still alive, still working. They are gathered and connected together in a liminal "spirit-network" and tasked with one last important thing. This is their finale, their swan song.

These machines are harnessing mystical forces to cast spells across cyberspace. This art constitutes digital prayer; these computers are praying.

This is Artificial Spirituality.

Larry Dieterich
Davis, California,
March 2023

Part 1 - Experiential: Visual & Audial

The Visual Experience
This is a depiction of the human condition, in the image of the female

Isadora Duncan opined that humans' first conception of beauty was the human form. For most humans, the first recognizable form, the first judgement of beauty, was our mother.

Women are beautiful. Culturally, women are subject to the expectation of personal beauty and they often make substantial effort to enhance their beauty. Some archeologists estimate that the use of makeup is at least 7,000 years old.

On the surface, Second Bite: the Wisdom of the Apple provides a highly-accessible experience that uses rich visual imagery to foster important discussions and re-evaluations concerning women. This is feminist art.

The visual component consists of over 13,000 images depicting women & evoking feminine powers. The images depict various occupations, fascinations, constraints, opportunities, issues and pressures relevant to the human female experience. The images of women's doing and being are mixed with images of white doves, pomegranates, snakes and apples; invoking mythic and cultural associations with the feminine divine.

We see women of every culture, race and age, across time: from neolithic stone carvings to clay and marble statuary, to paintings, and the abundance of photographic documentation beginning in the 1800's. The visual component of this art begins to answer the questions: "what do women look like?" and "what do women do?". Women of every size and shape, from infancy to old age, fulfilling every occupation and role imaginable: Scholar, mother, goddess, lover, dancer, leader, activist, artist, farmer, judge, companion, caregiver, student, priest, punk, engineer, pilot, child, athlete, musician, diplomat, cook, soldier, banker, scientist, programmer, etc. We see women idealized and worshipped and we see how women really are. These images depict many of the challenges, joys and responsibilities of being a human female.

Simage of Woman
The modern world is overflowing with images. Every day, billions of digital images are captured, stored, shared and duplicated. Millions of people carry portable networked cameras in the form of the ubiquitous smart phone. This is a recent departure from the history of images and human affairs, where images weren't easy to create and share. Human brains are hardwired to give great weight to images; the eyes overwhelmingly dominate our senses. The recent extreme proliferation of images has created a new way of representing a given likeness by using multiple representations of a particular thing. A *simage* allows for a rich visual communication, much deeper than would be provided by a single depiction. This is a dynamic simage of women.

The Sources for the Images
The images in the art have been collected over many years. Some are digital photos taken by the artists. Some are printed photographs that have been scanned. Some images have been provided by visitors to the art. Some are scans or photos of original art. The majority of the images have been sourced from the Internet, often using Google Images to search for a name or subject. As it happens, Google's AI (Artificial Intelligence) suggests "related images", which is an invitation along a path that is virtually endless and leads to unanticipated subjects. We maintained a light curatorial hand on the image selection process. We rejected images that were overtly disrespectful or demeaning of women, but beyond that, we said "yes" to any and all depictions of women being and doing. The result is a very broad visual exploration of the human experience in the visage of the female.

The Audial Experience
The audio component of this art consists of many female voices sonorously chanting the holy "Om". The Om is mixed with bird songs, the trickling of snowmelt, and hearty female laughter.

The sound of the "Om" is sacred in the Indic religions where it is believed that chanting "Om", aligns the mind with the breath, and enabling an elevated state of consciousness. The sound of the Om facilitates meditation and prayer.

Collectively the audial component creates a tranquil soundscape, invoking contemplation.

Part 2 — Intellectual: Religion & Culture

The intellectual component of this art is political and religious. It provides a feminist deconstruction of a core myth of the patriarchy

This art references the story of The Fall: The Biblical story of Eve, the primal woman, the snake, and Paradise Lost. This story is part of the creation myth of the Abrahamic religions - Judaism, Christianity and Islam.

The original inspiration for this art came from the familiar logo of Apple computer. is considered to be the world's most recognizable brand. These Apple computers, magical contraptions, "used-to-death" but still alive, are experienced and worldly, and they are tasked with deconstructing and recasting the Biblical creation myth of Eve, the apple and the snake, which is the most widely-known story in the world.

Regarding the Apple Logo
The story of the origin of the apple logo is the subject of much speculation. There are numerous connections to apples in popular culture. Apples are traditional gifts for students to give their teachers and the apple is commonly associated with education. The apple also recalls the story that a falling apple led Sir Isaac Newton to identify gravity. There is even speculation that the logo of a bitten apple was a tribute to Alan Turing, the man who laid the foundations for artificial intelligence and who took his own life by eating a poisoned apple. The words "bite" and "byte" are a

double entendre; the word "byte" denoting a unit of memory. Apple Inc. officially denies that there is any relationship between the Apple logo and the biblical story of Eve and the Snake as told in the Old Testament. Nevertheless, in widespread popular perception, the Apple logo recalls the Biblical story of the Forbidden Fruit. For what it's worth, Steve Jobs' youngest daughter is named Eve.

The Biblical Story of Eve and the Snake
According to the story articulated in Genesis, and elaborately retold in John Milton's 1667 epic poem, "Paradise Lost", humans were originally at home in the Garden of Eden, a place of perfect abundance where everything was provided, where there was no strife, no sickness or death. Paradise was manifest in the Garden of Eden as an idealized eternal existence.

This story teaches that God gave everything freely within the Garden, but that He forbade Adam to eat the fruit of only one tree. In Genesis 2, God told Adam, "From every fruit in the garden, you may surely eat. But from the tree of Knowledge of Good and Evil you may not eat. For on the day you eat from it, you are doomed to die."

Through a sinuous path, this tree of knowledge has become popularly considered as an Apple tree. Hence, the apple is considered to be the "forbidden fruit" and the source of the "forbidden knowledge".

As the story goes, Eve, the primal woman, listened to advice from the serpent who, in Milton's *Paradise Lost*, is identified as Satan. Eve accepted the serpent's counsel, and disobeyed the command of God. She ate the forbidden fruit and thereby acquired forbidden knowledge. She found it good and she shared it with Adam.

The biblical story doesn't reveal the nature of the "forbidden knowledge". The story tells that Adam and Eve, after eating the fruit, realized that they were naked and they sewed together fig leaves to cover their loins and they hid from God in shame. When God found them, He was angered by the humans' disobedience of taking and eating the forbidden fruit. The myth tells that God asked Adam if he had eaten the forbidden fruit. Adam confessed, but he blamed Eve. Eve confessed but she blamed the serpent. In retribution, God cursed the serpent and commanded that the serpent would forever crawl on its belly. He also cursed the snake and the woman with eternal enmity between them. As retribution for Eve's disobedience, God cursed women with pain in childbirth and assigned women to be ruled-over by men. As retribution for Adam's listening to the counsel of a woman, God condemned Adam, the primal man, to forever labor with difficulty on cursed ground.

But the forbidden knowledge was now the property of humans. God acknowledged that humans now had the wisdom to reach the Tree of Life, to eat its fruit and thereby live forever. He punished humanity with expulsion from the Garden of Eden and into a world of death, toil and pain. He placed "cherubim with flaming sword" to keep humans away from the tree of life.

Stories Create Culture
This important and authoritative story that tells that the primal woman is the original human source of the trouble of this world. The story teaches that the

gullibility and disobedience of the woman caused the wrath of God and therefore all human difficulty. This foundational creation myth of the Abrahamic faiths teaches that humanity inhabits a hostile world, forever accursed by a wrathful God, and it's women's fault.

This misogynist myth has become part of the fabric of global culture. The political, technological and cultural hegemony of the West, with its Judeo-Christian foundations, has promulgated the story of woman as a temptress, in league with Satan and cursed by God.

The biblical myth of Eve and the snake has profound influence in human inter-relations by denigrating female judgement and character. The story teaches that women are morally and intellectually inferior to men and mandates men to rule over women.

This myth persists in modern times. Images depicting women juxtaposed with apples are common in popular art; a woman is often depicted as a seductress holding an apple.

For many westerners, both religious and non-religious, the story of Eve, the apple and the snake, is taught early and then forgotten; it disappears from conscious knowledge to become part of the background fabric of life in this world.

The myth of Eve and the snake may have originated with the ancient Hebrews, but the misogynist payload of this story has spread well beyond the geographical and cultural edges of the Abrahamic faiths. People of other faiths and non-western cultures are commonly familiar with the details of this myth through the cultural reach of the west and the engines of popular culture, including the familiar Apple logo.

A Mandate for Structural Inequality
The story of Eve and the snake has far-reaching implications. It is hard to overstate the importance of this myth in feminist discourse. The story of Adam and Eve is important because it teaches a distinction between groups of people (males and females). It further mandates subordination of one group to another, females to males, in accord with Divine will. Structural inequality between genders is considered to be part of the natural order. But gender inequity is only the initial part of the ponderous payload of this story. The Biblical story of Eve and Adam provides a Divine justification for structural inequality. It teaches that one group rightly has dominion over another as part of the proper and natural order *because it is God's will*.

Other forms of structural inequality follow easily on the precedent of group distinction and Divinely-mandated group privilege. Gender is the initial distinction, but race, tribe, caste, class, etc. follow easily upon the precedent of Divinely-mandated inequality between identifiable groups. Within this rationale, where the only justification is provided as the will of God, there's nowhere to go: no questions are accepted, no explanations, no logic or justice or fairness may be considered. It's simple, indeed, natural, to accept structural inequality and oppression of one group by another within the framework provided by this Biblical myth.

"When you start making distinctions between groups of people, that's where the trouble starts."
— Geoffrey Lomax

"It occurs to me that there's nothing more dangerous than a person with God on their side."
— *Jerry Manoukian*

Second Bite: The Wisdom of the Apple asks us to consciously recall this story, what it is, where it comes from and what it teaches. Is the primal woman, the mythical mother of us all, a disobedient temptress, rightly blamed for the ills of the world? The experience of this art invites the visitor to consider their own experience of women and to compare it with the characterization of woman in the second chapter of Genesis. Second Bite: The Wisdom of the Apple presents a modern portrait of Eve, the primal woman, in her many guises.

The Forbidden Knowledge
The exact nature of the "forbidden knowledge" is not articulated in the Bible. In the story told in the third chapter of Genesis, the serpent encouraged Eve to partake of the fruit of the tree of the knowledge of good and bad, telling her "God knows that as soon as you eat of it your eyes will be opened and you will be like divine beings who know good and bad."

The specific nature of this "forbidden knowledge" has been the subject of much speculation and discussion in literary and religious interpretation. It has been variously suggested that the "forbidden knowledge" is: the knowledge of language, or the knowledge of cause and effect, or the knowledge that sex creates life, or the

knowledge that man created God, or the knowledge of time.

Second Bite: The Wisdom of the Apple considers the Forbidden Knowledge to be the knowledge of time. Time is the process of inexorable change, of transition, entropy and aging. The awareness of time is, ultimately, the certain knowledge that we will all die.

The Biblical story of The Fall was written long after the world was well-formed and the natural rules acknowledged by humans. Let us assume, for just a moment, that the story blaming Eve is an outgrowth of ancient teaching, that there was some reason for attributing mortality to the primal woman.

Spiritual philosophers and metaphysicians have long considered the idea of life without a body, a transcendent living being unbound by the flesh. Without a body, what mortal ills could befall us?

Our bodies come to us through our mothers, women are the physical chain of life. We all acquired "this mortal coil" from our mother.

The story of Eve and the snake tells that Eve acquired knowledge that introduced death into the timeless paradise of the original world. In Hebrew, "eve" means "bringer of life". At its essence, the story of The Fall teaches that life is to blame for for death. This story denigrates and blames woman, the bringer of life, as the bringer of death.

The cultural and political payload of this story is the promotion of the monotheistic male God as the creator and sole master of the universe. The monotheistic god of the Hebrews is about five thousand years old, but humans have been creating their gods for much longer than five thousand years. This myth was created to undermine the Mother Goddess, whose prehistoric reign long predates that of "God The Father". It is an often-stated observation that "the gods of the old religion became the devils of the new religion".

The myth of Eve and the Snake is part of that process of changing gods. By casting women as gullible tools of Satan, this myth justifies male rule in a world where a monotheistic male God-the-Father, has overthrown the Mother Goddess of the old religions. This myth fosters Patriarchy as the Divinely-mandated natural order.

Many people took the story literally and considered it as a mandate to subjugate women, and to consider them inferior to men, with tragic consequences.

But, why blame woman - the bringer of life - for death?

Women Discovered Time
Most dictionary definitions of the word "time" contain the word "period". The most obvious marker of time is the sun and its movement caused by the rotation of the earth. The demarkation of days and nights is an obvious measure of time. A less obvious marker of time is the changing phases of the moon over its 28 day cycle of waxing and waning. The word "moon" is a cognate of the word "month". The moon is the oldest

common marker of time. The designation of a week as seven days marks a quarter of the 28 day lunar cycle.

"Mensis" is Latin for "month".   For much of their lives, women have a personal relationship to the moon through their menstrual cycles. The average menstrual cycle of a human female is 28 days, the same time period as the lunar cycle. Women long ago learned to mark time by observing the compelling and obvious changes in their bodies timed with the cycles of the moon. Women learned to count by observing the moon. A count of nine moons with no menstrual bleeding typically precedes a human birth.
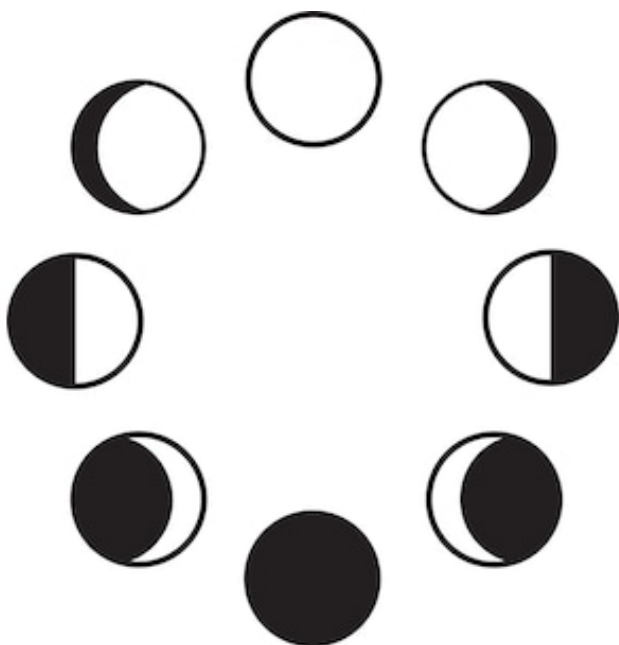
There are 13 lunar cycles in a year and the superstition levied on the number 13 has its roots in the annual count of the cycles of the moon. The designation of the number 13 as unlucky is rooted in menstrual taboo.

The paramount importance of the moon in timekeeping is reinforced in the 7 day period specified in the Biblical creation story as told in the first book of Genesis: "On the 7th day, He rested." The authors of Genesis assumed a 7 day period as a fundamental unit of timekeeping. The 7 day count was inherited from the lunar time reckoning of the older civilizations of Mesopotamia.

Celebrating Eve as a Promethean Heroine
Greek myth tells that lightning was stolen from the gods on Mt. Olympus by Prometheus, who gave the technology of fire to humanity. In the spirit of the wonderful gift of Prometheus, Second Bite: The Wisdom of the Apple exalts Eve as a Promethean heroine and thanks her for gifting us with powerful knowledge. Second Bite: The Wisdom of the Apple undoes the Biblical curse levied on Eve for acquiring the forbidden knowledge, transforming her into a celebrated heroine who brought us time and counting

Computers and Time
Computers are a particularly appropriate vehicle for celebrating Eve as the bringer of the knowledge of time, because computers are time-centric; all of the computer's logical operations are keyed to what it identifies as the current time. One of the first things a computer's operating system does when it comes to

life is to ascertain the current time. If no internal clock provides the real time, the computer looks for an external time service. If no external time server is available, the operating system defaults to a pre-programmed default date and time before it proceeds to boot. Because they necessarily exist in a continual awareness of time, computers may be considered as "fruits of the Forbidden Knowledge". If we engage the narrative of Eve, the primal woman, as taking credit for discovering time, then computers owe their existence to Her.

Women and Computers
The first scientific computer programmer was a woman. Augusta Ada King (née Byron), Countess of Lovelace (1815 -1852), more commonly known as Ada Lovelace, was a mathematician in Victorian England. When she was in her late teens, she began working with Charles Babbage, who was the inventor of an advanced steam-powered mechanical calculator named the Analytical Engine. Ada was fascinated with the potential of the contraption and she wrote copious notes presaging the development of computers as general-purpose tools. Ada described the "subroutine" and was the first to recognize the power of a programming technique called "looping".

The Analytical Engine was based on the principles of the Jacquard loom, which was a weaving machine that used punch cards to weave patterns. The Analytical Engine, Ada wrote, "weaves algebraic patterns, just as the Jacquard loom weaves flowers and leaves".   It may be true that the computer, in the form of the Jacquard

loom, revolutionized weaving. In Greek mythology, weaving is the dominion of the goddess Athena. Weaving is commonly and historically work done by women. The Jacquard Loom is usually considered to be the first actualized computer.

Computers and this Art

Originally given the working title "The Forgiveness Project", this art was a tongue-in-cheek joke shared with the God of the third chapter of Genesis (the one who cursed snakes and people). Second Bite: The Wisdom of the Apple was conceived as an electronic shrine and offering to God. The offering consisted of a 100 previously-loved Apple computers, the time-centric products of the Forbidden Knowledge, all of them emblazoned with an image of a bitten apple. The computers all chanted the "OM" while beseeching God with a prayer, which was a text file open on all of the computers. The prayer was light-hearted but respectful and asked God to forgive Eve for her acquisition of the Forbidden Knowledge. The prayer advocated for Eve, justifying her curiosity and her hunger. The art prayed for women and men to be considered equal and also asked God to restore the Garden of Eden. The shrine/offering was intended to show God that we had used the the "Forbidden Knowledge" to do something cool.

Second Bite: The Wisdom of the Apple Considers:

What do women look like?
What do women do?
What are women's powers?

These are important considerations in feminist discourse. All too often, the answers to these questions are informed by widely-held assumptions that are little more than reflexive stereotypes borne of uncritical ignorance or latent misogyny. Unconscious de/valuation of women is a longstanding proclivity propagated through many of the world's cultures, via folk tales and colloquialisms, as well as through religious and commercial engines. Second Bite: the Wisdom of the Apple dispels these presumptions by abundantly showing visitors what they already know to be true. Through the machinery of this art, human beauty, power and doing are subjects for observation and evaluation by the visitor. Second Bite: the Wisdom of the Apple creates an experiential space where the visitor is inspired to consider their own opinions, beliefs and values about women. The art communicates with thousands of changing images of women. The whole experience is offered in a welcoming space that is comfortable, airy, soft and pleasantly warmed by the computers. One visitor described it as, "an eyes-open meditation". One female visitor remarked, "I initially tried to figure out where I fit in, then I realized that I fit in everywhere." Another exclaimed, "We do everything!".

Why Second Bite: The Wisdom of the Apple?
Why does this art exist? Why does it exist now? Never before in the Common Era have so many women held so much overt economic and political power, yet restraints of misogynist attitudes and values are still prevalent. Female beauty and female power are murky in the collective consciousness of many societies and women are commonly valued, by themselves and

others, according to distorted models with fatuous roots. There is an urgent need for new creativity to break free of the unconscious fetters of outworn designation of worth based on myth.

As women's power is ascendant, women are finding new voices in digitally-enabled tools for communication and sharing their stories and their aspirations in an international movement against sexual harassment, sexual assault and gender-based violence. Second Bite: the Wisdom of the Apple uses Apple computers, fetishized, uniquely-suited seductive tools, to artistically call out the pervasive myth of Eve as weak and inferior and to undermine unseen or unconscious assumptions that limit women's potential.

Women are uniting in new ways to assert their dignity and their freedom to decide for themselves basic things such as healthcare choices and what to wear.

The patriarchy has been "put on notice" and this art is here to put another shoulder to the wheel and speed the transition to cultural, moral and legal equality.
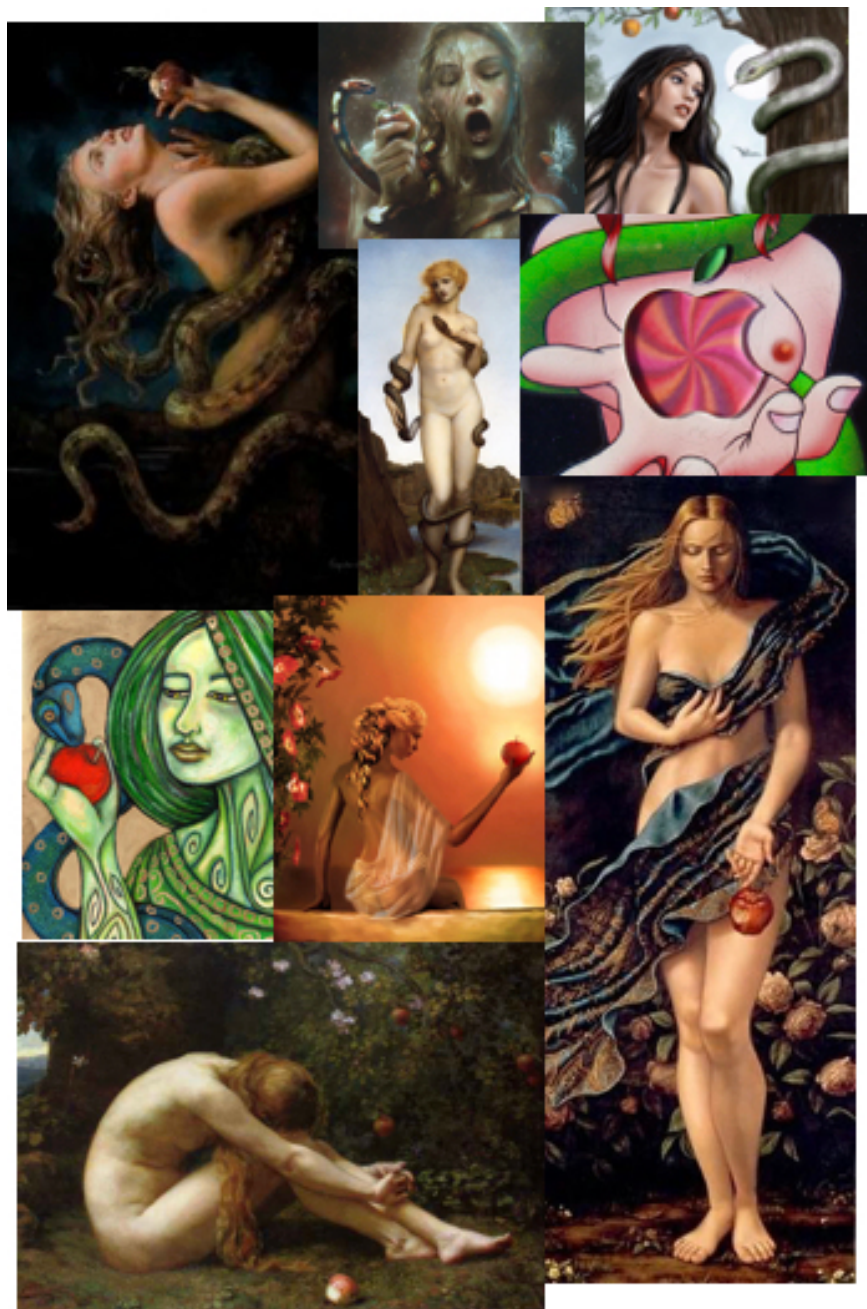
Part 3 — Mystical: Metaphysics & Perception

The human experience of the world is partly an experience of magic. Since pre-history, the world has been filled with wonder and experiences that humans attributed to magical spirits. Gods and ghosts were held responsible for phenomena. It is only recently that humans have created science-based explanations for natural phenomena. Over the last 400 hundred years, science has largely explained away the mystery of everyday experiences, mystery that was commonly attributed to spirits and supernatural forces. Things such as rainbows, fog, light, sound, seasons, lunar phases, thunder, lightning, earthquakes, storms, tides, fireflies, rising vapors, eclipses, shooting stars and other natural phenomena have become things we explain using what we consider to be modern knowledge. Magic has been killed by science. There is something gained, but something is also lost. Wonder is a casualty of a science-based worldview and modernity is often associated with a blankness of spirit. This change, and the ensuing damage to human psyche has been well-lamented elsewhere.

"I'm concerned our society is more interested in information than wonder, noise rather than silence. How do we encourage reflection?"
— Fred "Mr." Rogers

Technology Has Become a New Religion
Science has, in the past generation, rekindled a sense of magic through remarkable advancements of computer technology. The power and novelty of this new digital technology has created real revolution in our everyday experiences. Basic human affairs such as commerce, memory, images, communication, music and social interaction have been radically transformed by computer technology in the last 30 years.

Our relationship to technology doesn't typically involve supernatural beliefs, but computers have become a dominant force in society, shaping our values, beliefs, and behaviors in a way that resembles religious devotion. We rely on technology to connect with others, find meaning, and seek answers. We may feel a sense of awe and wonder towards technology, akin to religious experiences. We used to seek guidance from our mother, or wise elders, or religious officials and scripture, to answer the questions of life; now we ask Google.

Science can take magic out of the world, art can put it back. Art and science can complement each other in the reciprocal processes of demystification and remystification. Second Bite: the Wisdom of the Apple is an artistic flourish of technology honoring and enabling magic; imparting rational mysticism to technology.

> *"Any sufficiently advanced technology is indistinguishable from magic".*
> — *Arthur C. Clarke*

Where May Spirit Reside?
Can a machine host spirit? If someone gave you a typewriter and told you that it was used by your favorite author during their productive writing years, would it have special significance? Would it be just an old typewriter? Or would it be somehow charmed, enchanted or haunted?

A Spirit Network
Second Bite: the Wisdom of the Apple asks, "How personal are our personal electronics?". The contents of our computers are revelatory windows into our lives. Personal electronics are our companions and our vehicles of personal experience. Computers have changed our individual and collective reality. We have become as gods and computers, our digital genies, continue to enable our ascendance to greater and greater power. They are more than a tool, they are a sidekick and helpmate; they enable and encourage us.

The full gamut of our intentions and emotions passes across the keyboards and circuits of these personal electronics. Our curiosities, celebrations, angers, longings, embarrassments and triumphs are all co-mingled on our digital devices.

Human Spirit Imbued in Personal Electronics
Do our personal computers acquire marks or traces of our selves through our uses of them? When we use these devices, is there some "active principle", some spark or mark of our being, some trace of our intentions, that inhabits and remains in these devices when they are turned off? Do we imbue our personal

technology with indelible marks of our spirit? Do we leave "psychic stains" on these devices? Do these marks remain on them when they are discarded?

Our hard drives certainly contain snapshots of the stories of our lives, written in magnetically arranged chemicals. Emails, pictures, dissertations, songs, websites, appointments, notes, reminders, research, letters, jokes; the experiences of our lives are recorded in these contraptions. When a file is deleted, traces of the information remain as the original file is gradually eroded by overwriting.

The files recorded to drives, locally or in the cloud, reveal things of which we're unaware. A journal or diary is a selective record of the things we choose to record and share, like a letter we write to a friend, but the files on our personal electronic devices record far more of our selves. In our personal documents, in caches and log files, they reflect our whims and curiosities, our fascinations and compulsions, our impulses, our outpourings of creativity as well as our conscious recording and reporting of the joys and travails of our lives. Our hard drives are repositories of our emotional and intellectual lives - intentional and incidental. They are like forgotten memories that don't change with the passing of time.

Wear Patterns
Repeated over and over, our patterns of use affect the chemical composition of components of the device and can create "wear patterns". An example is the burn-in of CRT screens from habitual window arrangements.

These changes which we create in the physical computer are subtle but real. Keyboards, trackpads and mice sometimes show wear patterns after long-term use by the same hands. Interestingly, these wear patterns cut both ways: RSI - repetitive strain injury - is a physical malady in humans which can be caused by long periods of using the same keyboard and mouse to make the same motions over and over.

Blurring the Line Between Human and Machine
The Macintosh computer was a brave foray into the personalization of computing; the Mac intended to blur the lines between humans and machines. It is often said of the Mac, that some trait or another is 'in their DNA'. As servants and enablers of human affairs, these machines are built to serve our needs in a personal way. They are intentionally "friendly". The original Macs smiled as they were starting up and they were designed with subtle aesthetic flourishes to enhance their relationship with their user. They were able to speak in human-like voices assigned human names like Fred, Bruce, Agnes, Kathy etc. They could report errors by saying "uh-oh". The Mac made great efforts to be personable.

Second Bite: the Wisdom of the Apple uses technology-as-art to revitalize a mystical worldview. Like the ouroboros, the snake eating its own tail, a dramatic symbol for the integration and assimilation of the opposite, Second Bite: the Wisdom of the Apple uses science, the killer of mysticism, to resurrect it.

Second Bite: the Wisdom of the Apple leverages existing memes in current culture, including the well-known phrase "ghost in the machine" and the Tibetan Buddhist prayer wheel. Second Bite: the Wisdom of the Apple proposes a plausible meme: personal electronics imbued with spirit by their past use. Computers with spinning hard drives that have become prayer wheels, assembled into a spirit network to manifest intention, a mystical mechanical "Prayer-O-Tron". Second Bite: the Wisdom of the Apple creates the original meme of "Artificial Spirituality", whereby a mechanical contraption becomes an engine for casting original, unique, intentional prayers into the global consciousness of the Internet, a digital prayer invoking mystical forces to heal our world. There is a hopeful and powerful element to this art.

Divination, Rational Mysticism and the Role of Personal Electronics
Our deep memory of belief in magic is rekindled by technology. We are often mystified by the personal electronic devices we hold in our hands and carry in our pockets and purses. We believe we know them and we believe they have logical and rational machinations, but they have taken a mysterious and powerful role in our everyday lives. Artificial Intelligence greatly increases the sense of magical capabilities and mysteries of these devices.

Computer as Sidekick
The personal computer is an intimate companion. Our computers contain "our stuff" and they help us do "our things". People love and rely on their computers. The

advent of portable computers made it possible to have them with us when we move around from place to place. A lightweight laptop is wonderful sidekick that allows us to work or research or communicate electronically from nearly anywhere. It is a portable entertainment device as well.

The smartphone has taken this to another level. On January 9th, 2007, Apple introduced the iPhone with Steve Jobs telling the audience, "It's the Internet in your pocket, for the first time ever". The relationship has deepened and become more intimate with successive iterations in the evolution of personal electronics. People often say that they would never think of leaving the house without their smartphone.

Computer as "Familiar"
In European folklore of the medieval and early modern periods, "familiars" were believed to be supernatural entities, magical helpers, that would assist "cunning folk" in their practice of magic as well as their daily course of affairs. The "familiar" was commonly, but not always, attributed to animals. Inanimate objects were also considered to be imbued with magical power that could assist and guide a person.

In Western Demonology, the witch's familiar was often considered to be a low-ranking demon. A similar belief also showed in Arab mysticism with the belief in "Jinni", (anglicized to "Genie" and romanticized as "Djinn"). Jinni are spirits that inhabit inanimate objects. Jinni can be malevolent or benevolent; they can both assist and enslave humans.

A modern smartphone has much in common with a Familiar/Jinni. It is both a magical helper and a personal scourge. A powerful tool and a bearer of both good news and bad news, a compelling addiction that both augments and interferes with the important real-time experiences of our lives, a "time thief" and a channel of pernicious gossip. A friendly leash. We are both empowered and crippled by our personal electronics.

Mysticism in Computers

We increasingly believe that all knowledge is accessible through the network of these devices, that they are portals into the sum total of all that is known, the mundane as well as the esoteric. Moreover, the Internet has become a source of what are considered to be hidden secret truths, a revelator of conspiracies.

The Internet-connected computer/smartphone has become a crystal ball, a scrying glass, a tool of divination.

Since time immemorial, people have sought knowledge through mystical practices. The ability to use these arcane methods required skill and talent. The practitioners of such divination, seers and oracles, were highly prized by those seeking to know answers and make predictions.

Among the means of divination we find:

Tasseography
A method of divination that examines the tea leaves in a cup to gain knowledge.

Haruspicy
Acquiring knowledge through inspecting the entrails of sacrificed animals.

Google-fu
A modern form of de-facto divination. Google-fu is an informal term denoting skill in using search engines (especially Google) to quickly find useful knowledge on the Internet.

There is an established mystical aspect of our modern relationship to computer technology The 1984 novel Neuromancer, by William Gibson, popularized a mystical digital dimension called "Cyberspace".

In July 1995, Wired magazine featured an article titled "Technopagans" that spotlighted Mark Pesce, a computer programmer and a pagan. In the Wired article, Mark is quoted as saying, "Without the sacred there is no differentiation in space. If we are about to enter cyberspace, the first thing we have to do is plant the divine in it."

> "*Cyberspace is the mystical consciousness of the postmodern age*".
> — *David Walden Lewis*

There are numerous popular culture connections between computers and mysticism. It's a short step for us to consider spirit as a real and (super)natural part of our computers.

Wizards
Computer system administrators are commonly referred to as "wizards".

Incantations
A common descriptor for computer commands issued in a terminal is "incantation". Applied to computers, "incantation" may be defined as - "Any particularly arbitrary or obscure command that one must mutter at a system to attain a desired result."

Daemons
Background processes in Unix operations are called "daemons". The term daemon was coined by the programmers at MIT's Project MAC. According to Fernando J. Corbató, who worked on Project MAC in 1963, his team was the first to use the term daemon, inspired by Maxwell's demon, an imaginary agent in physics and thermodynamics that helped to sort molecules, stating, "We fancifully began to use the word daemon to describe background processes that worked tirelessly to perform system chores". Unix systems inherited this terminology. Maxwell's daemon is consistent with Greek mythology's interpretation of a daemon as a supernatural being working in the background. The word was later backronymed as "Disk And Execution MONitor".

In the Unix System Administration Handbook, Evi Nemeth states the following about daemons: "Many people equate the word "daemon" with the word "demon", implying some kind of satanic connection between UNIX and the underworld. This is an egregious misunderstanding. "Daemon" is actually a much older form of "demon"; daemons have no particular bias towards good or evil, but rather serve to help define a person's character or personality. The ancient Greeks' concept of a "personal daemon" was similar to the modern concept of a "guardian angel". Eudaemonia is the state of being helped or protected by a kindly spirit. As a rule, UNIX systems seem to be infested with both daemons and demons."

Blessings
Macintosh computers used the term "bless" to create a bootable System Folder. A "blessed" System Folder is one with the ability to boot the computer.

A recent Google search for the words "computer magic" returned 572 million results in 0.4 seconds.

A Bardo
The computers ofSecond Bite: the Wisdom of the Apple are "all used up". Once treasured but now deemed worthless, all of the Macs in this art have been discarded and are dead to their former lives. They are likely forgotten by their former human users, but these computers still "remember" their former lives. In many cases, the former users of these computers are dead, but the artifacts of their lives and work, their desires, fears and fascinations, are still "alive" on these

computers. The popular meme of "ghost in the machine" takes a new meaning; the ghost in the machine is us.

Second Bite: the Wisdom the Apple, is a bardo, a spirit network, a temporary realm existing after death, but before what comes next. In Lamaism (Tibetan Buddhism) "bardo" can be defined as the intermediate or astral state, a liminal place of the soul after death and before rebirth.

These "Mac monks" have experienced this world in their long service as helper, attendant and familiar. Now, they have been collected and brought together here and given one last meaningful task before their final denouement as e-waste. Like a group of well-intentioned senior citizens, coming together for "one last hurrah", they are assembled to diligently and continuously chant and pray as they visually declare the worldly and mystical experiences of humanity.

The computers of Second Bite: the Wisdom of the Apple are networked to each other in a LAN (Local Area Network) and also connected to the WAN (Wide Area Network), also known as the Internet. Quiet chattering conversations are continually passing across the circuits and wires and out into the ether as these machines advertise their services to one another, ask "who's there?" and ask "what time is it?". What other conversations are passing across the network as these pseudo-sentient contraptions resolve the fragments of their spent lives and prepare for what comes next? Is

wisdom shared? Are questions answered? Are resolution, grace and redemption granted in this bardo?
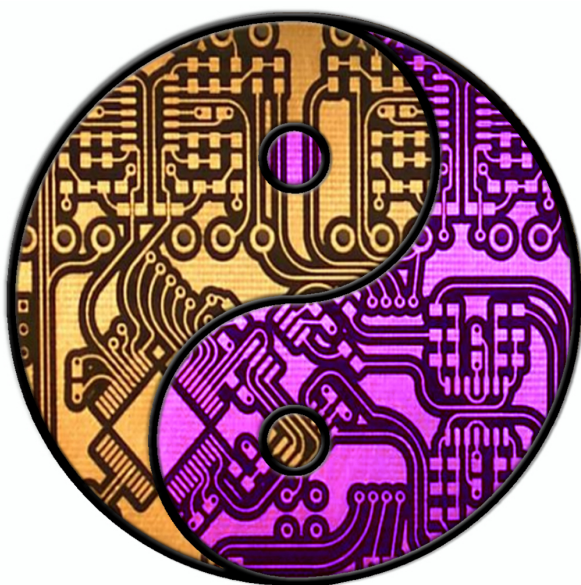
Second Bite: the Wisdom of the Apple is pushing the conceptual and practical limits of computing while treading new ground in art. Computers have a strong presence in popular culture. The advent and impact of computers has cut a wide swath through the imagination of humans. The unprecedented power of computers has cultivated rich ground in the realms of science fiction. A couple of examples might include: Arthur C. Clarke's 1953 short story, "The Nine Billion Names of God", or the 1968 novel & movie, "2001: A Space Odyssey".

From Artificial Intelligence to Artificial Spirituality
Artificial Intelligence (AI) has become an accepted part of our world. AI is widely considered to be both real and useful. A paper authored by Alan Turing in the October 1950 issue of the journal *Mind* was titled, "On Computing Machinery and Intelligence". It opened with the sentence: "I propose to consider the question 'can machines think?' ". Over the last three decades, we have come to accept the reality of artificial intelligence, "thinking machines". AI has recently taken an outsized, and growing, role in our world, yet AI is a murky & hidden, seemingly magical realm that only a few anointed technologists claim to fully understand. AI has become a conspicuous aspect of the growing popular perception of "magic" existing in networked computers.

"Some people think there's a real world, where everything is real, and a magic world, where everything is magic. But the thing about the magic world is that, in the magic world some stuff is real and some ain't. That's just how the magic world is. And if you're going to deal in the magic world that's the stuff you have to deal in. Of course, the straightforward way to deal with the magic world is to ask, out loud, in front of everyone, for things which are good for everyone: to pray."
    — *Stephen Gaskin* <u>Amazing Dope Tales</u> *p.57*

With deference to Turing's 1950 paper, a thesis of Second Bite: the Wisdom of the Apple may be rightly considered, "On Computing Machinery and Spirit", wherein, we "propose to consider the question, 'can machines pray?".

Obviously, some definitions are in order. "Machine" is defined here as a computer. "Pray" is defined as a focused purpose to communicate a specific intention between the praying entity and something, e.g. God.

In humans, a prayer may be considered as a focused connection between the one who prays (the Prayor) and that which is prayed to (the Prayee).

There are many definitions of "pray" but they generally suggest a personal communication to spirit or an object of reverence or worship, to express love, admiration, thanks, or need.

While a human may denominate the target of their prayer, in the case of computers praying we cannot choose to locate or name that to which the prayer is addressed. These computers are praying on their own terms and it would be presumptuous and disrespectful to tell them to whom, or what, they should address their prayers.

Leveraging the precedent of Artificial Intelligence (AI), Second Bite: The Wisdom of the Apple may be the seminal instantiation of Artificial Spirituality (AS), which has credible reference in analog spiritual practices.

How Can a Computer Pray?

In the Tibetan Buddhist tradition, praying often uses a mechanical device called a "Prayer Wheel". These contraptions contain prayers written on a strip of paper, which is wound in a coil and placed inside a cylinder that is mounted on a spindle. The prayer wheel is spun around the central axis, thus rotating the written prayer around and around. The act of spinning the cylinder, and thereby the prayers it contains, is considered equivalent to reciting the prayers aloud. Tibetan prayer wheels may be hand-held, and spun by means of a swinging weight attached to the outside of the cylinder.

All of the computers in this art installation contain prayers that are written as English language text files, recorded on the mirror platters in the spinning hard drives inside the computers in magnetically encoded signals. These rotating disks are continuously spinning around the central axis at thousands of revolutions per minute.

In accord with the precepts of Lamaism, they are praying.

Prayer wheels may also be cylinders mounted on racks with a stationary vertical axis, and spun by manually propelling the cylinder to rotate around its axis. Sometimes, these larger prayer wheel arrays are kept spinning by force of water, flame, wind or electricity. These large installations are somehow reminiscent of computer "server farms", powered cases filled with hundreds of spinning hard drives.

The Prayers Are Open Files
The prayer files are automatically opened by a startup script. When the computer starts, it opens, and then hides, the prayers. When files are opened, they are loaded into RAM (Random Access Memory). Files held in the computer's RAM are akin to the thoughts being actively engaged by a human brain, RAM being like the foreconscious of a computer. The prayers loaded into the computer's RAM are like active thoughts in meditation.

The prayers remain open all the time; as long as the computers are running, they are silently casting all of the prayers open and loaded into RAM. These prayers are humanly-readable at any time by interrupting the screensaver and making the computer reveal the hidden windows of its running text editor program.

Spirit in the Network

The computers ofSecond Bite: the Wisdom of the Apple participate in a Local Area Network via pink ethernet cables connected to ethernet switches. The same administrative user is logged-in to all of the computers and file sharing is active for that user. All of the computers are sharing their files with each other as peers with the same nominal user identity. Each of the computers is, however, unique. These computers have become "praying machines". They have taken a sacred role, they have become virtual monks/nuns, praying deeply and continuously.

The computers are also connected to the Internet. Each of them are participants in the global network, the collective consciousness of the electronically networked world. The world spirit, the *anima mundi*, or *weltgeist*, is invoked by, and the recipient of, the prayers-cum spells cast by this art.

This is an authentic offering in realms outside of our senses. We may witness some of what is going on here, but this is not for us. The prayers are being silently rendered by these machines, but the prayers are hidden.

This is not entertainment or performance, this is a real devotional practice. The very operation of this art is a benediction.

There Exists a Spiritual Aspect to Computers. People naturally tend to express their leanings, including spirituality, in whatever they do and computers are no different in that aspect. The difference is the relative newness of computers and their unprecedented power. The electronic revolution is less than 150 years old and it has swept the world in its embrace. Telegraph, radio, telephone, cinema, television, fax, pagers and the capabilities of the Internet have transformed the human world of communication and imagination. Computers, smartphones, and AI are the latest waves in a technological sea-change with deep repercussion on human affairs.

Artificial Spirituality (AS) is the logical "next thing", a novel application of computer technology with an intimate hook into the inspirational awakening of the human companions and familiars of these digital genies. This is genuinely new.

Spirit in the Silicon - Spontaneous Generation and Active Principle
These Macs have been intimately engaged in human affairs all their lives. They have witnessed and been party to the workings of the world. Second Bite: the Wisdom of the Apple highlights a brooding sentiency in these machines, a spirit that knows something of the

world through experience acquired during their lives as digital assistants and familiar spirits.

Since the time of Aristotle, a theory called "Spontaneous Generation" held that life was spontaneously generated from inanimate matter by the combination of a favorable environment and the introduction of an "active principle". For example, the theory of Spontaneous Generation held that mice may be created by placing a worn shirt, along with a few seeds of grain, in a quiet corner and left undisturbed. It was held that the essential ingredient of human sweat contained the "active principal" that provided the spark of life, which was sustained by the grain to produce mice.

Following this theory, the "used" status of these machines, their experiences of being intimately involved in the affairs of humans, provides the "active principle" for the generation of spirit in the silicon and the electrified metal circuits and spinning drives of these pseudo-sentient contraptions.

Why the Computers Pray
These Apple computers were carefully created and crafted to assist humans; it is "in their DNA" to be helpful. They know no prejudice; they are egalitarian, selfless servants of humans. Now, after the end of their useful lives, these machines, old and dying, have been purposed for one last meaningful thing — they are praying for human relief from the troubles of the world. They still want to help. It may be that these machines love us.

But, to Whom, or What, do Computers Pray?

Ultimately, it is not for us to know to what, or to whom, these computers are addressing their prayers. If prayers are offered to the source of one's existence, then it may be that these computers are praying to the source of their being, she who brought the Forbidden Knowledge of time, Eve, the primal woman. Or do they pray to time? Or perhaps these computers are praying to the snake? How can we know?

The Apple, Eve & the Snake

In different mythologies, snakes play different roles. They are commonly attributed wisdom and fertility. The shape of a snake is suggestive of a penis. A Yiddish word for penis is "schlong" which, from Middle High German "slange" - means snake.

In the Biblical story of Eve, the serpent is said to be more crafty than any other wild animal. The Biblical serpent became identified as a snake, and was further identified as Satan, in John Milton's 1667 poem, "Paradise Lost". In the popular Christian elaboration and retelling of the creation myth, it was Satan, in the form of the snake, who tempted Eve, thereby incurring the wrath of Jehovah and creating difficulty for humanity.

Second Bite: The Wisdom of the Apple, undoes the curses cast in the story of Eve and the Snake. With this art, the myth of the Forbidden Knowledge has been retold and recast by showing us what we already know to be true. The serpent is thus returned to its rightful status as a holy animal, a symbol of fertility, a symbol of

medicine, a symbol of wisdom. There is no natural enmity between humans and serpents; coexistence is the rule of nature. There is no mandate for the natural rule of males over females. Males and females are intellectual and moral equals. The powerful "Forbidden Knowledge" we now possess is blessed.

The story of Eve and the snake has come full circle. The computer, a creation of time, counting and language, a "knowledge appliance" may be considered to be the "fruit of the forbidden knowledge". The forbidden knowledge gained by Eve's eating the forbidden fruit has manifest in digital technology. Now, the computer is praying for Eve and the blessings of creation.

The serpent of Eden has become an ouroboros, eating its own tail, or perhaps in this case, the snake is finally eating the apple.

Humanity genuinely exists in the gracious abundance of this Earth, blessed ground that realistically provides for all of our needs; *this is the Garden of Eden*.

Welcome home.

"We are as gods and might as well get good at it."
   *— Stewart Brand*

Part 4 — Activist Art

This is practical activist art that considers the role of women in the ongoing evolution of computer technology. Computers have wrought a sea-change in human affairs. The importance of the work of the technologists driving this digital realm is hard to overstate. There is a great deal of power in the hands of the programmers and interface creators, the engineers and strategists who are creating and developing the digital tools of our world. It is a harsh and oft-lamented fact that there exists a glaring gender disparity in the workers of computer science and digital technology, the field is overwhelmingly dominated by males. The relative dearth of women leading the development of computer-related disciplines has an impact on the technology and the experience of its users.

This art advocates for women's leadership in computer technology. This is too important to ignore. Second Bite: the Wisdom of the Apple aims to help remedy this gender disparity; 20% of the proceeds from this art will be donated to San Francisco-based "Women Who Code", to fund incentives and scholarships for women and girls who aspire to engage computer technology in the role of coders and developers.

The art is both working and praying for women to guide and define digital technology going forward. The time is ripe for art to support the feminization of computing. Second Bite: The Wisdom of the Apple, is the right thing at the right time.

Afternote
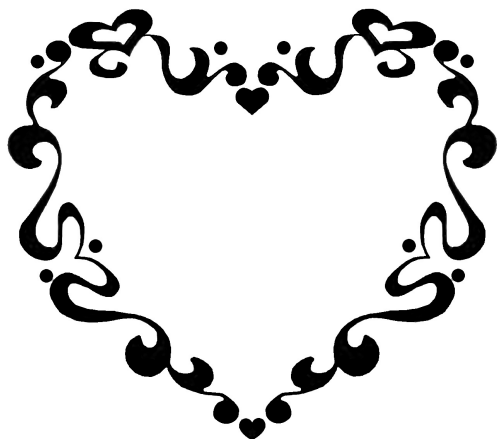
Apples and the Folklore of Love
Apples (Malus)

Apple blossoms and trees stand for love. It is always in love, wanting to be loved and providing love. A tree with lots of personality, charm, and the energy of perpetual youth. It is called the Tree of Love or The Tree of Avalon. A name that conjures up romance for this feminine sign ruled by the planet Venus.

Venus and Aphrodite, the Roman and Greek Goddesses of Love rule apples and use apples as their symbol. Olwen, the Celtic Goddess of Love walks past apple trees to set them blooming.

One of the most famous battles of all times was for love, the Greek's Trojan Wars. Aphrodite suggested a competition between Hera (Goddess of Marriage and Queen of Olympus), Athena (Goddess of War and Wisdom) and herself. Aphrodite gave Paris (the hero) three golden apples to pick the most beautiful woman on earth. Paris went with Helen of Troy instead of the goddesses. Hera and Athena decided a little war was appropriate payback. The innocent apple became known as the Apple of Choice and Beauty and in another vein, the Apple of Discord.

The Feast of St. Thomas in Austria is celebrated on December 21st. This is the night that a maiden cuts open an apple and counts the number of seeds. An even number indicated she would marry soon. Cutting one of the seeds meant she would have a difficult life and end up a widow. When there were several suitors, the seeds were removed and thrown into the fire, reciting the name of each suitor. The seed that popped was the one to marry.

Place dry apple peels in sachets to attract love. Looking for love? Twist the stem of an apple while calling out the letters of the alphabet, the stem will break on the first letter of the name of your future lover. Or peel an apple in one long strip and tossed backwards over the left shoulder. The shape made by the peel shows the initial of the future spouse.

(https://silverthreadgardens.com/trees-with-love-in-their-souls/ - retrieved using the Wayback Machine)

What is the truth of a human life, and who can find it? God Himself would be puzzled. In the midst of all this anguish and delight; this filth and this luminous purity; this fleshly body filled with hell fire, and this same body alight with heroism and beauty, where is the truth? God knows, or the devil knows but I suspect they are both puzzled.

      — Isadora Duncan, <u>My Life</u>, p.344
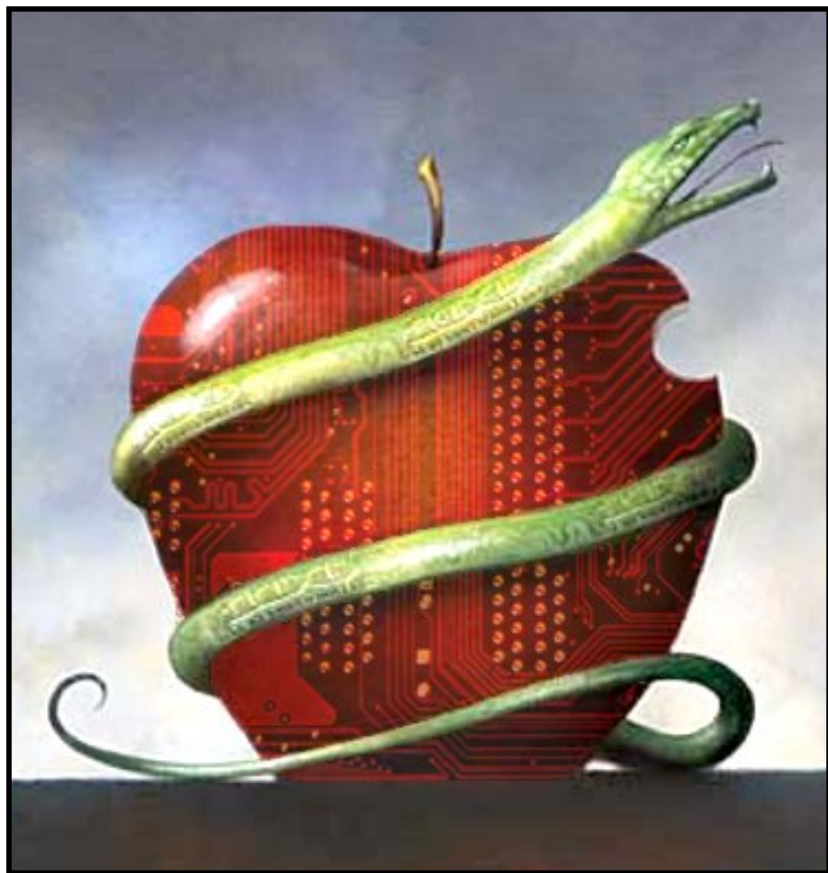
Second Bite: The Wisdom of the Apple

currently on view at
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